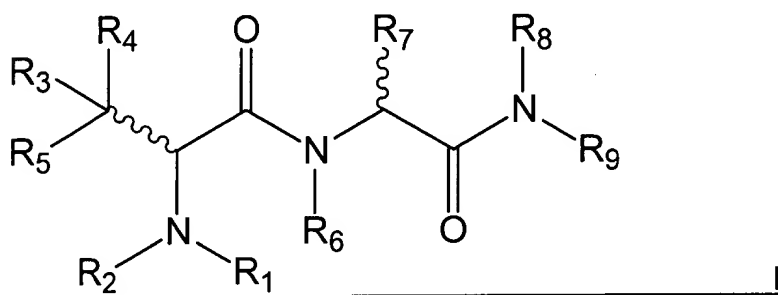


Amendments to the Claims

IN THE CLAIMS:

1-22. (Canceled).

23. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

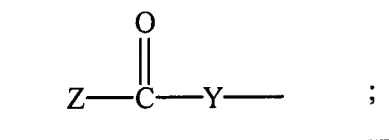
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or
non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen
atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms
are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂,
-NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO,
-COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀,
-SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or
unsaturated alkyl group.

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven
member non-aromatic cyclic skeleton within the definition of R,

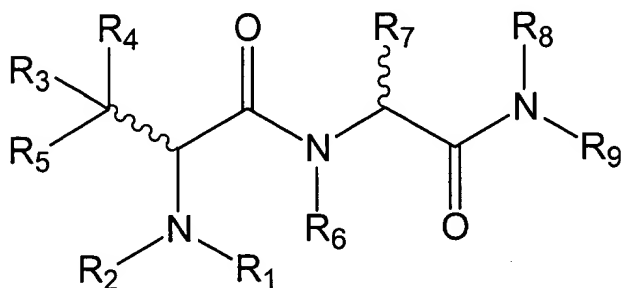
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, and pyrrolyl;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

24. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

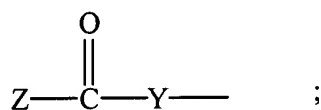
R_5 is selected from the group consisting of: naphthyl, anthracyl, ~~or~~ and pyrrolyl;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or

unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

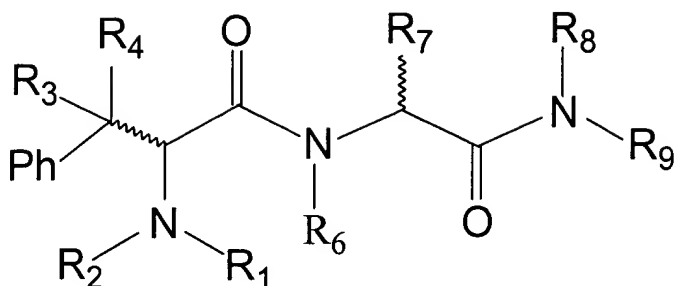
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR, -SH, -SR, -NH₂, -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

25. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

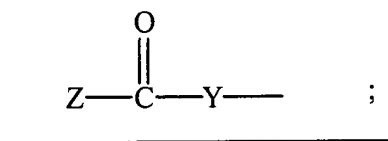
~~R₅ is phenyl~~

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group.

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

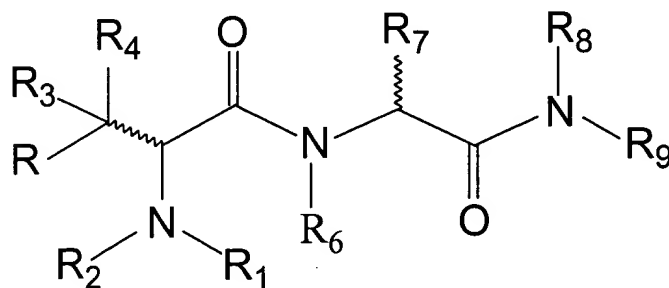
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

26. (Cancelled).

27. (Currently Amended) ~~The compound of claim 22, wherein~~

A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

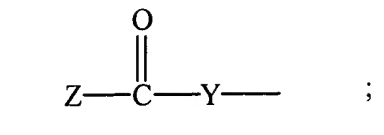
R₅ is R

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN,

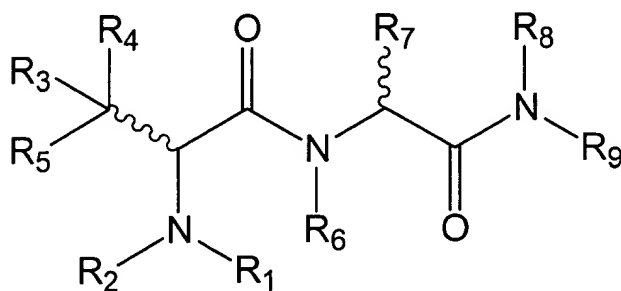
-CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂,
-SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

28. (Cancelled)

29. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a

ring;

one of R_3 and R_4 is H and the other of R_3 and R_4 is ArR- ;

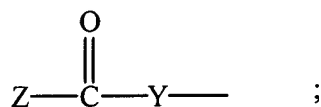
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S,

-O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

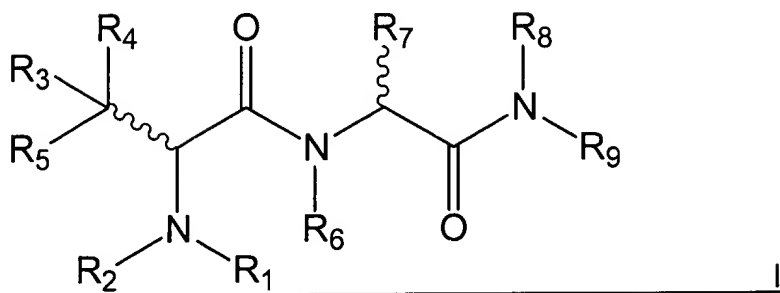
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

30. (Cancelled).

31. (Currently Amended) ~~The compound of claim 30, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: methyl, ethyl, n-propyl and n-butyl;

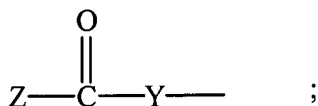
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are

optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

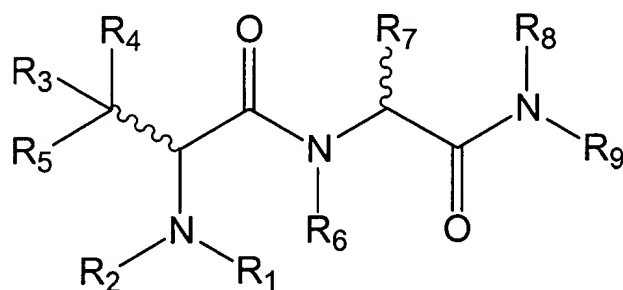
Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected

from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

32. (Previously Presented) The compound of claim 31, wherein R₃ and R₄ are each -CH₃.

33. (Previously Presented) The compound of claim 32, wherein R₅ is Ar.

34. (Currently Amended) ~~The compound of claim 22, wherein A~~ compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are joined and form a moiety selected from the group consisting of β-cyclopropyl, β-cyclobutyl, β-cyclopentyl and β-cyclohexyl;

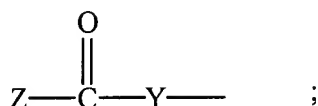
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

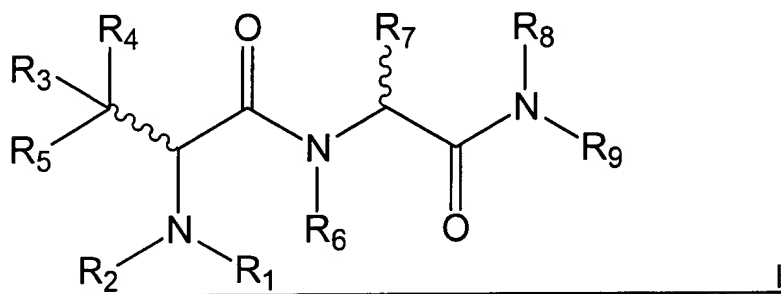
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

35. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of H, methyl, ethyl, propyl, n-butyl and acetyl, provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon

atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

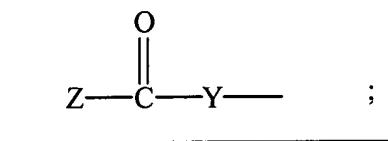
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO,

-COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

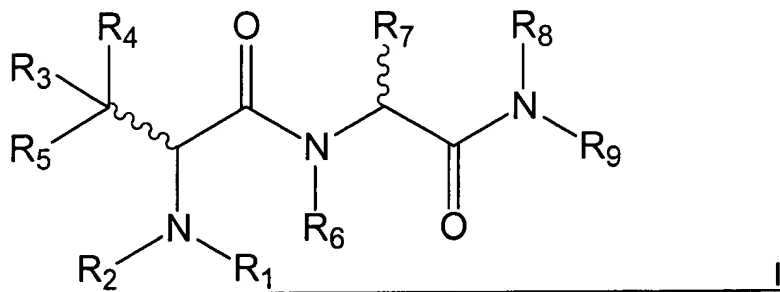
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

36. (Currently Amended) ~~The compound of claim 22, wherein~~

A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are joined and form a moiety selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

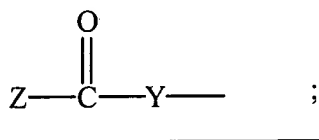
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-:

and

R_g is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms

are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

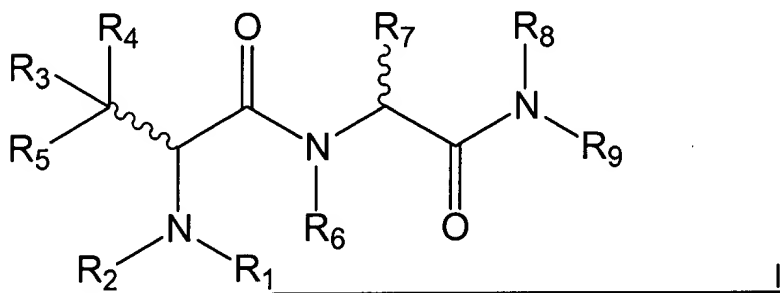
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically

acceptable salt thereof.

37. (Currently Amended) ~~The compound of claim 22, wherein~~

A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently H, CH₃ or acetyl, provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

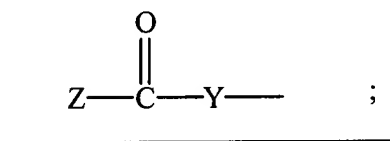
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

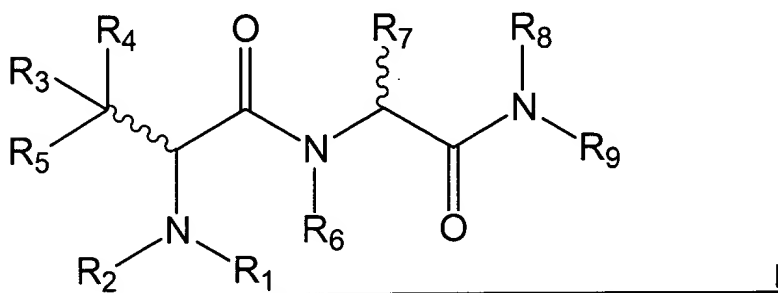
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR, -SH, -SR, -NH₂, -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

38. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently H or CH₃, provided that if either one of R₁ and R₂ is H,

each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl,
then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or
unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing
one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and
the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀,
-O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br,
-Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH,
-COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one
to ten carbon saturated or unsaturated alkyl group;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

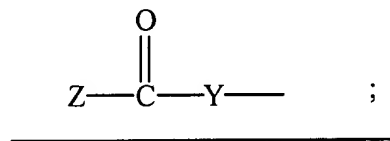
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or
non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen

atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group, the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected

from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

39. (Previously Presented) The compound of claim 38, wherein R₁ is H, and R₂ is -CH₃.

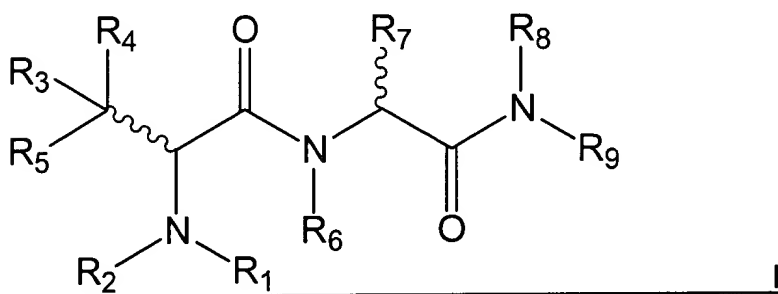
40. (Previously Presented) The compound of claim 38, wherein R₅ is Ar.

41. (Previously Presented) The compound of claim 38, wherein R₃ and R₄ are each -CH₃.

42. (Previously Presented) The compound of claim 41, wherein R₅ is Ar.

43. (Previously Presented) The compound of claim 42, wherein R₅ is phenyl.

44. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic

skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

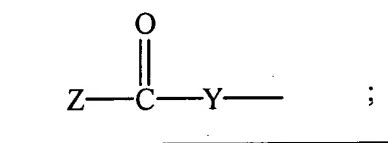
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is H or CH₃;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO,

-COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

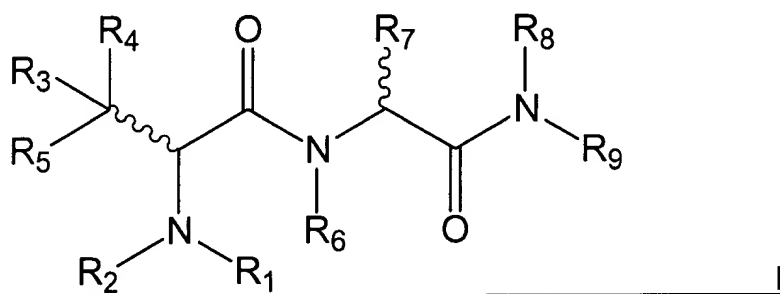
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.

45. (Previously Presented) The compound of claim 42, wherein R_6 is H or CH_3 .

46. (Previously Presented) The compound of claim 45, wherein R_6 is H.

47. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR- , provided that neither R_1 or R_2 is tert-butoxycarbonyl, and provided that if either one of R_1 and R_2 is H, each of R_3 , R_4 , R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl, then for whichever of R_1 or R_2 is R or ArR- , the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: $=\text{S}$, $-\text{OH}$, $-\text{OR}_{10}$, $-\text{O}_2\text{CR}_{10}$, $-\text{SH}$, $-\text{SR}_{10}$, $-\text{SOCR}_{10}$, $-\text{NH}_2$, $-\text{NHR}_{10}$, $-\text{N}(\text{R}_{10})_2$, $-\text{NHCOR}_{10}$, $-\text{NR}_{10}\text{COR}_{10}$, $-\text{I}$, $-\text{Br}$, $-\text{Cl}$, $-\text{F}$, $-\text{CN}$, $-\text{CO}_2\text{H}$, $-\text{CO}_2\text{R}_{10}$, $-\text{CHO}$, $-\text{COR}_{10}$, $-\text{CONH}_2$, $-\text{CONHR}_{10}$, $-\text{CON}(\text{R}_{10})_2$, $-\text{COSH}$, $-\text{COSR}_{10}$, $-\text{NO}_2$, $-\text{SO}_3\text{H}$, $-\text{SOR}_{10}$, $-\text{SO}_2\text{R}_{10}$, wherein R_{10} is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR- ,

or R₃ and R₄ are joined to form a ring;

R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

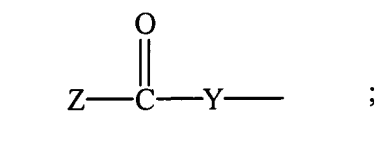
R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ is independently selected from the group consisting of: H, R, and ArR-;

R₈ is H or CH₃;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

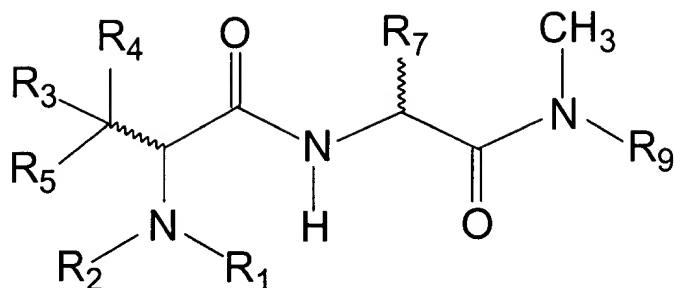
Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

48. (Previously Presented) The compound of claim 42, wherein R₈ is H or CH₃.

49. (Previously Presented) The compound of claim 45, wherein R₈ is H or CH₃.

50. (Previously Presented) The compound of claim 49, wherein R₈ is CH₃.

51. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

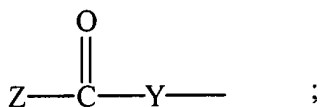
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is H

R₇ is independently selected from the group consisting of: H, R, and ArR-; and

R₈ is CH₃

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms

are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

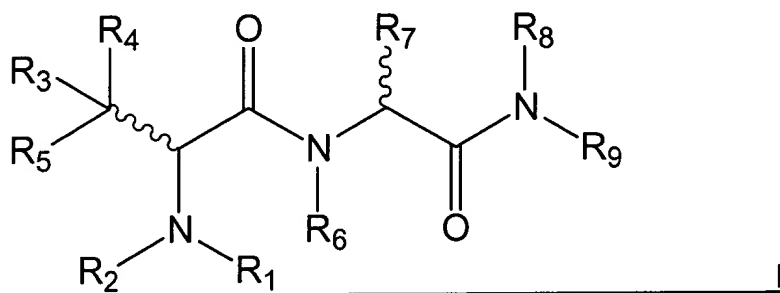
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently

selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

52. (Previously Presented) The compound of claim 42, wherein R₆ is H and R₈ is CH₃.

53. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

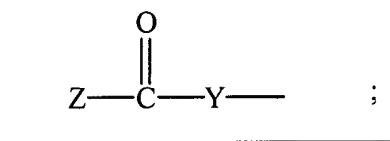
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ is a three to six carbon atom, branched alkyl group;

R₈ is independently selected from the group consisting of: H, R, and ArR-; and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group.

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R.

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

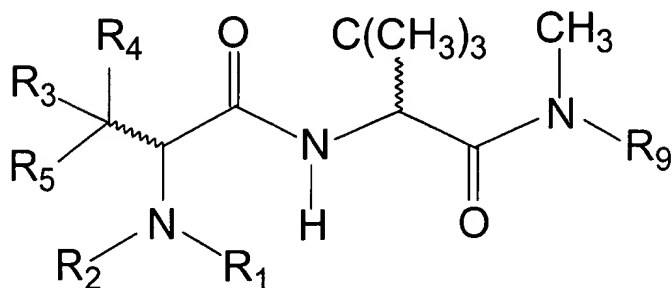
54. (Previously Presented) The compound of claim 42, wherein R₇ is a three to six carbon atom, branched alkyl group.

55. (Previously Presented) The compound of claim 45, wherein R₇ is a three to six carbon atom, branched alkyl group.

56. (Previously Presented) The compound of claim 49, wherein R₇ is a three to six carbon atom, branched alkyl group.

57. (Previously Presented) The compound of claim 53, wherein R₇ is -C(CH₃)₃.

58. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

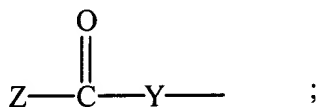
R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is H, R₇ is C(CH₃)₃, and R₈ is CH₃; and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂,

-NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

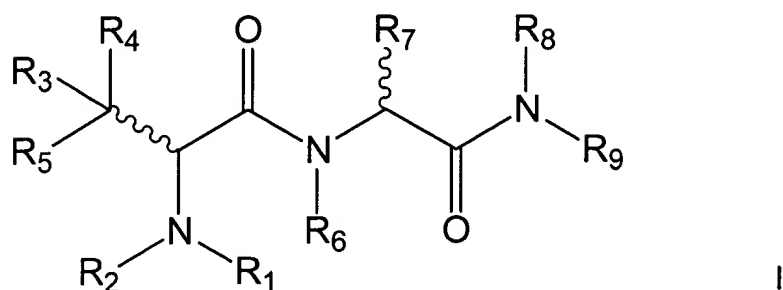
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH)(NH₂), or pharmaceutically

acceptable salt thereof.

59. (Previously Presented) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

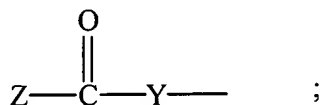
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

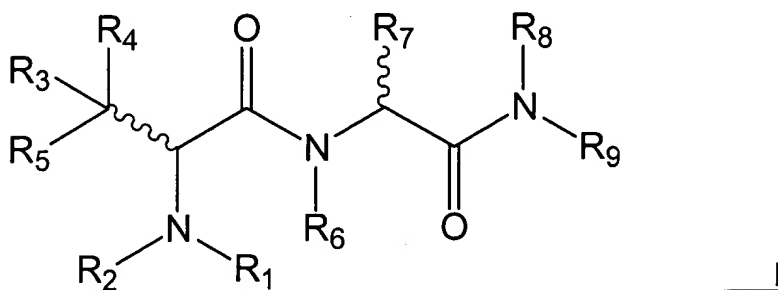
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is -NHCH(R₁₁)COOH or -NCH₃CH(R₁₁)COOH, wherein R₁₁ is R; or,
-(CH₂)_nNHC(NH)(NH₂).

60. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,

or R₃ and R₄ are joined to form a ring;

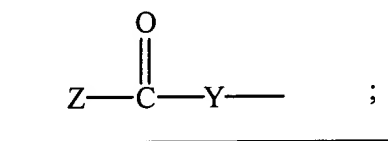
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

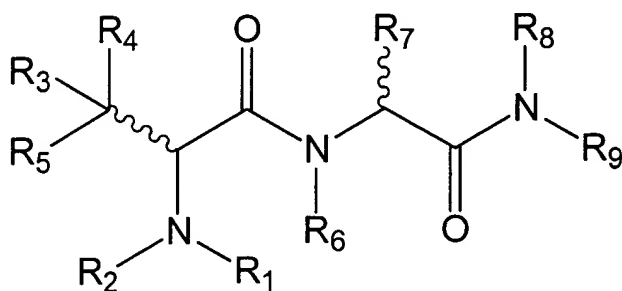
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is -OR₁₄ in which R₁₄ is a linear or branched one to six carbon alkyl group.

61. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a

ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

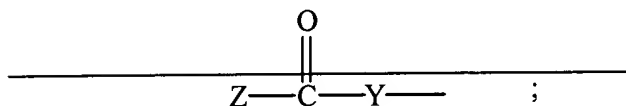
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is [[:]] Y-COOH;



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

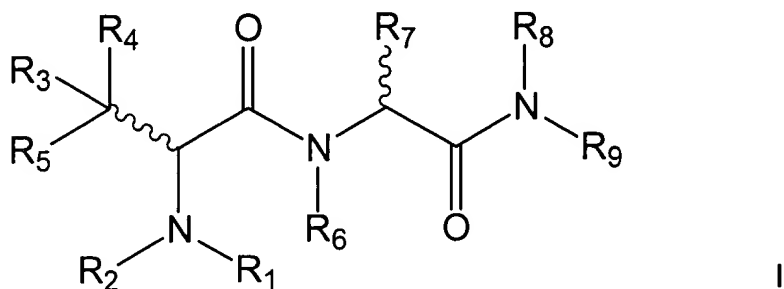
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;
and

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; ~~and~~

~~Z is -OH.~~

62. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-,

provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

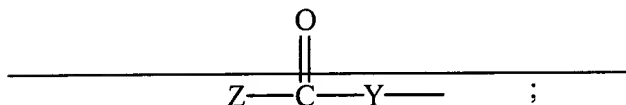
R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-,
or R_3 and R_4 are joined to form a ring;

R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;
and

R_9 is $[[[:]]$ Y-COOCH₃;



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R_1 and R_2 or by joining R_3 and R_4 is a three to seven

member non-aromatic cyclic skeleton within the definition of R,

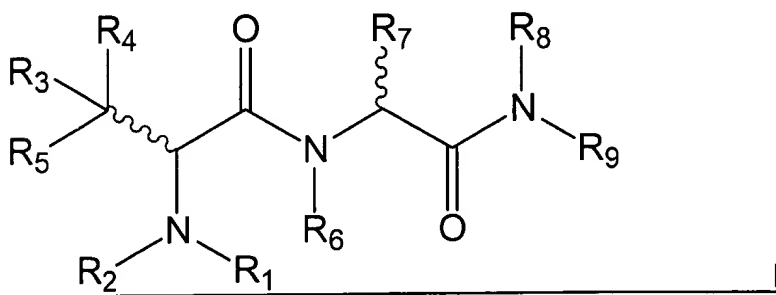
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinoliny, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;
and

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; ~~and~~

~~Z is -OCH₃.~~

63. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SO₂CR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-, or R₃ and R₄ are joined to form a ring;

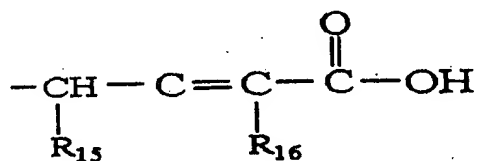
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ has the formula:



wherein R_{15} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl;

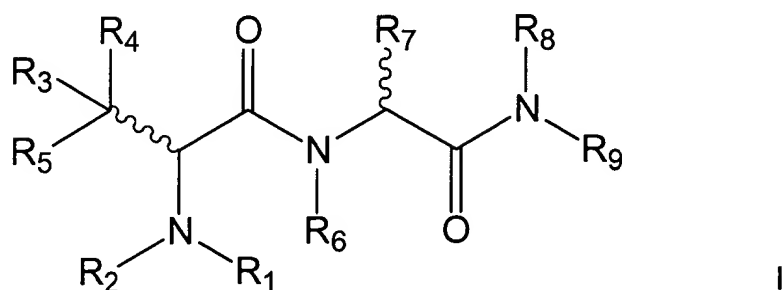
R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;
and

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R.

64. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and $ArR-$, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and $ArR-$, or R_3 and R_4 are joined to form a ring;

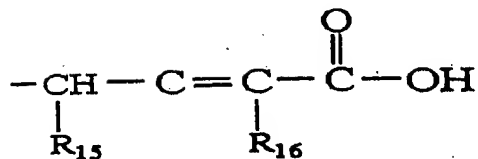
R_5 is selected from the group consisting of: H, R, $ArR-$, and Ar;

R_6 is selected from the group consisting of: H, R, and $ArR-$;

R_7 and R_8 are independently selected from the group consisting of: H, R, and $ArR-$;

and

R_9 has the formula:



wherein R₁₅ is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R₁₆ is methyl;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R; and

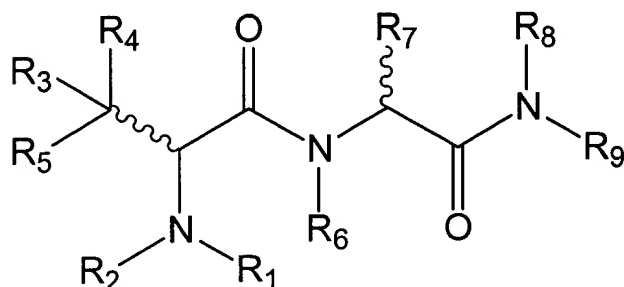
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl,

isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X[[:]]

~~Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and~~

~~Z is defined as a moiety selected from the group consisting of: OH, OR, SH, SR, NH₂, NRCH(R₁₁)COOH; and NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or (CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H, R, and C(NH)(NH₂), or pharmaceutically acceptable salt thereof.~~

65. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

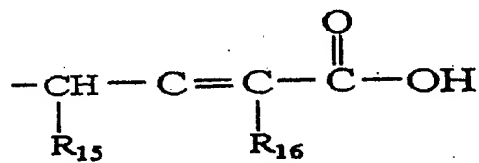
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ has the formula:



wherein R₁₅ is isopropyl and R₁₆ is methyl;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven

member non-aromatic cyclic skeleton within the definition of R,

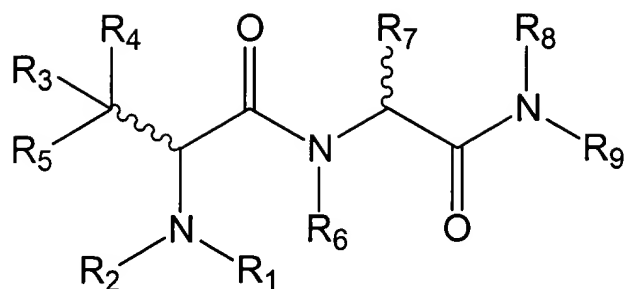
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R; and

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X[[:]]

~~Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and~~

~~_____ Z is defined as a moiety selected from the group consisting of: -OH, -OR, -SH, -SR, -NH₂, -NRCH(R₄₁)COOH; and -NRCH(R₄₁)COOH, wherein R₄₁ is a moiety having the formula: R, or -(CH₂)_nNR₄₂R₄₃, wherein n=1-4 and R₄₂ and R₄₃ are independently selected from the group consisting of: H, R, and -C(NH)(NH₂), or pharmaceutically acceptable salt thereof.~~

66. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and ArR-, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

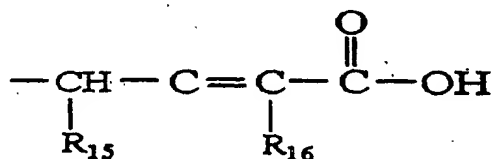
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is H or CH_3 ;

R_7 is a three to six carbon atom, branched alkyl group;

R_8 is independently selected from the group consisting of: H, R, and ArR-; and

R_9 has the formula:



wherein R_{15} is selected from the group consisting of: methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is selected from the group consisting

of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R; and

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X[[:]]

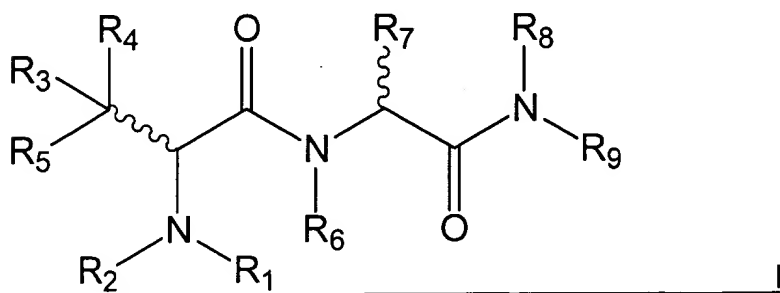
~~Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR, or X; provided however if R₈ is H, then the optional substituents on Y are limited~~

to R and ArR wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

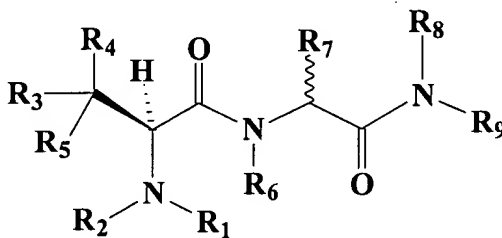
~~_____ Z is defined as a moiety selected from the group consisting of: OH, OR, SH, SR, NH₂, NRCH(R₁₁)COOH, and NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or (CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H, R, and C(NH)(NH₂), or pharmaceutically acceptable salt thereof.~~

67. (Cancelled)

68. (Currently Amended) ~~The compound of claim 22, A compound or pharmaceutically acceptable salt thereof, having the formula:~~



and having the configuration:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR.

provided that neither R_1 or R_2 is tert-butoxycarbonyl, and provided that if either one of R_1 and R_2 is H, each of R_3 , R_4 , R_6 and R_8 are H and R_5 is isopropyl or phenyl, and R_7 is methyl or benzyl, then for whichever of R_1 or R_2 is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and ArR-, or R_3 and R_4 are joined to form a ring;

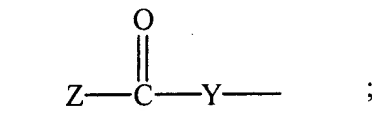
R_5 is selected from the group consisting of: H, R, ArR-, and Ar;

R_6 is selected from the group consisting of: H, R, and ArR-;

R_7 and R_8 are independently selected from the group consisting of: H, R, and ArR-;

and

R_9 is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or

non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

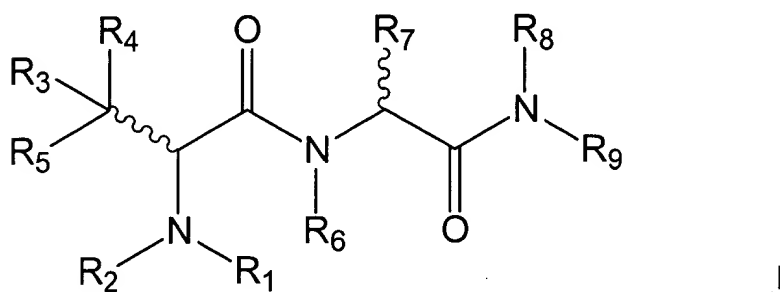
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH;

-SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

69. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one

to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-;

or R₃ and R₄ are joined to form a ring;

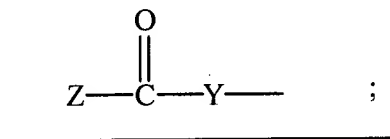
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

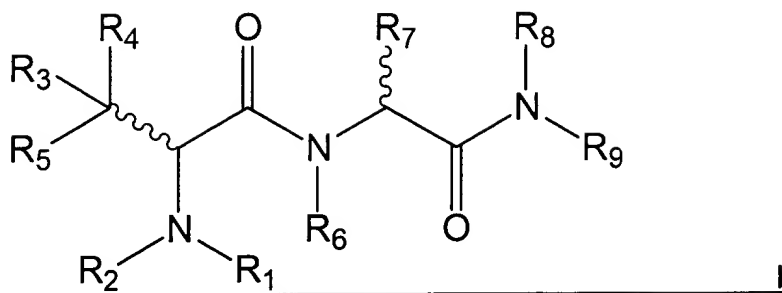
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

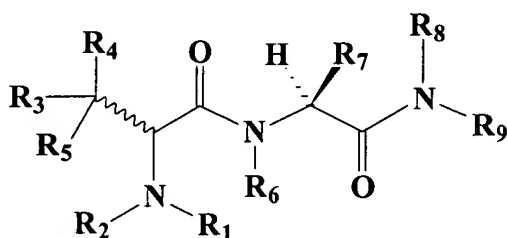
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl, wherein Y comprises a chiral center of the S-configuration centre having an s-configuration; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

70. (Currently Amended) ~~The compound of claim 22, wherein~~ A compound or pharmaceutically acceptable salt thereof, having the formula:



and having the configuration:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR-, provided that neither R₁ or R₂ is tert-butoxycarbonyl, and provided that if either one of R₁ and R₂ is H, each of R₃, R₄, R₆ and R₈ are H and R₅ is isopropyl or phenyl, and R₇ is methyl or benzyl, then for whichever of R₁ or R₂ is R or ArR-, the definition of R is limited to a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one

to ten carbon saturated or unsaturated alkyl group or R₁ and R₂ are joined to form a ring;

R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR-;

or R₃ and R₄ are joined to form a ring;

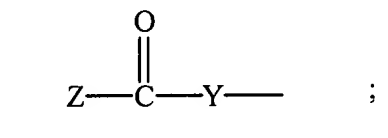
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is selected from the group consisting of: H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

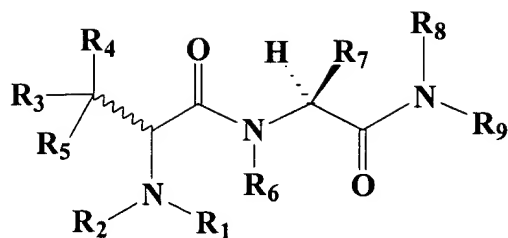
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

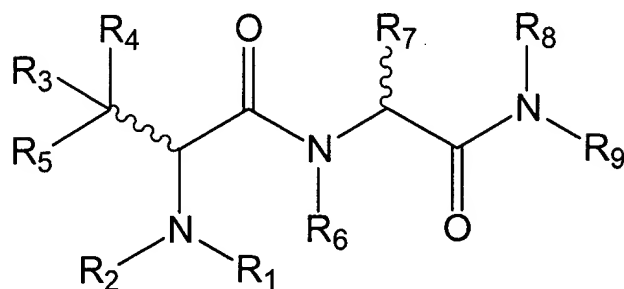
Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR, -SH, -SR, -NH₂, -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof.

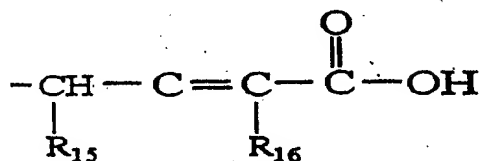
71. (Currently Amended) A compound or pharmaceutically acceptable salt thereof having the configuration:



and having the formula:



wherein R_5 is Ar; R_3 and R_4 are each CH_3 ; R_1 , R_2 , R_6 and R_8 are independently H or CH_3 ; R_7 is a three to six carbon branched alkyl group; and, R_9 has the formula



wherein R_{15} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R_{16} is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl;

R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂,

-NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

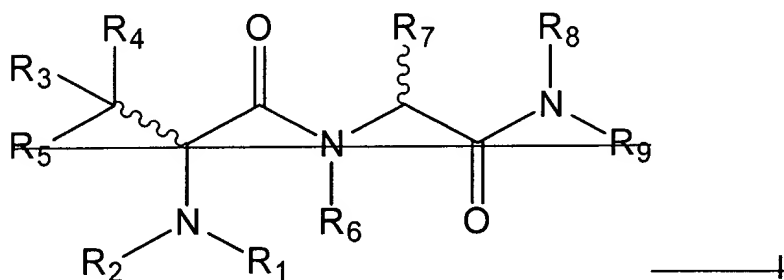
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X[[:]]

~~Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and~~

~~Z is defined as a moiety selected from the group consisting of: -OH, -OR, -SH, -SR, -NH₂, -NRCH(R₄₄)COOH, and -NRCH(R₄₄)COOH, wherein R₄₄ is a moiety having the formula: R, or -(CH₂)_nNR₄₂R₄₃, wherein n=1-4 and R₄₂ and R₄₃ are independently selected~~

~~from the group consisting of: H, R, and C(NH)(NH₂), or pharmaceutically acceptable salt thereof.~~

72. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

~~R₁ and R₂ are independently selected from the group consisting of: H, R, and ArR, provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a ring;~~

~~— R₃ and R₄ are independently selected from the group consisting of: H, R, and ArR, or R₃ and R₄ are joined to form a ring;~~

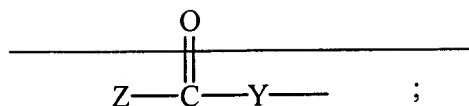
~~— R₅ is selected from the group consisting of: H, R, ArR, and Ar;~~

~~— R₆ is selected from the group consisting of: H, R, and ArR;~~

~~— R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR;~~

and

R_9 is:



~~R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, OH, OR₁₀, O₂CR₁₀, SH, SR₁₀, SOCR₁₀, NH₂, NHR₁₀, N(R₁₀)₂, NHCOR₁₀, NR₁₀COR₁₀, I, Br, Cl, F, CN, CO₂H, CO₂R₁₀, CHO, COR₁₀, CONH₂, CONHR₁₀, CON(R₁₀)₂, COSH, COSR₁₀, NO₂, SO₃H, SOR₁₀, SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,~~

~~the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,~~

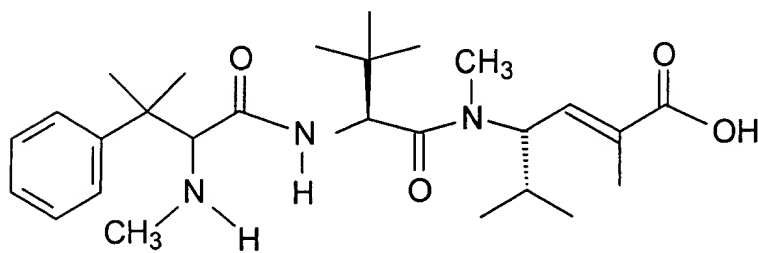
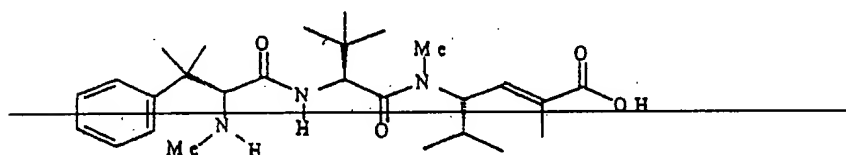
~~X is defined as a moiety selected from the group consisting of: OH, OR, =O, =S, O₂CR, SH, SR, SOCR, NH₂, NHR, N(R)₂, NHCOR, NRCOR, I, Br, Cl, F, CN, CO₂H, CO₂R, CHO, COR, CONH₂, CONHR, CON(R)₂, COSH, COSR, NO₂, SO₃H, SOR, and SO₂R;~~

~~Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;~~

~~Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and~~

~~Z is defined as a moiety selected from the group consisting of: OH, OR, SH, SR, NH₂, NRCH(R₄₁)COOH, and NRCH(R₄₁)COOH, wherein R₄₁ is a moiety having the formula: R, or (CH₂)_nNR₄₂R₄₃, wherein n=1-4 and R₄₂ and R₄₃ are independently selected from the group consisting of: H, R, and C(NH)(NH₂), or pharmaceutically acceptable salt thereof;~~

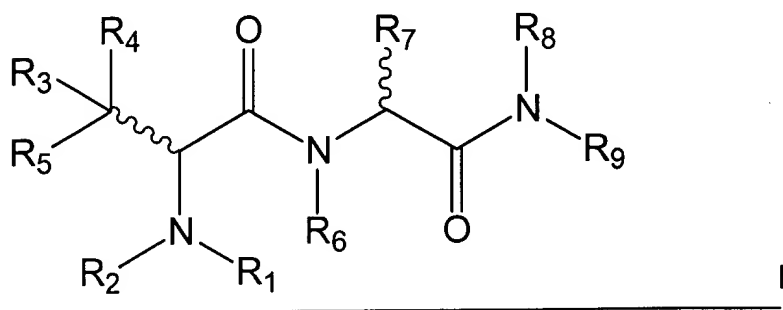
~~wherein the compound has the structure:~~



~~in which Me is CH₃.~~

73. (Currently Amended) A pharmaceutical composition suitable for treating

tumors comprising an anti-tumor effective amount of a compound or pharmaceutically acceptable salt having the formula having the formula



wherein:

R_1 and R_2 are independently selected from the group consisting of: H, R, and $ArR-$, provided that neither R_1 or R_2 is tert-butoxycarbonyl, or R_1 and R_2 are joined to form a ring;

R_3 and R_4 are independently selected from the group consisting of: H, R, and $ArR-$, or R_3 and R_4 are joined to form a ring;

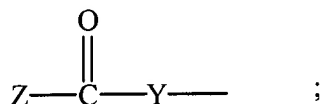
R_5 is selected from the group consisting of: H, R, $ArR-$, and Ar;

R_6 is selected from the group consisting of: H, R, and $ArR-$;

R_7 and R_8 are independently selected from the group consisting of: H, R, and $ArR-$;

and

R_9 is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or

non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with R, ArR-, or X; provided however if R₈ is H, then the optional substituents on Y are limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl, anthracyl, or phenanthryl; and

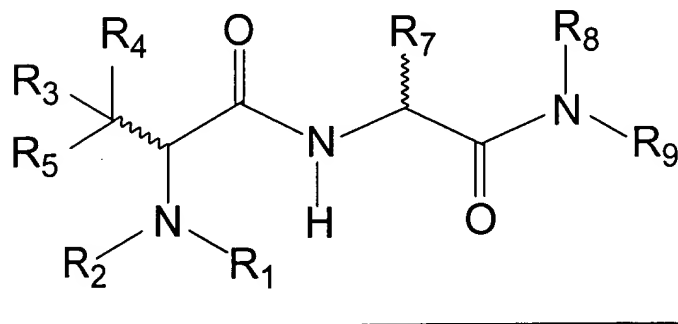
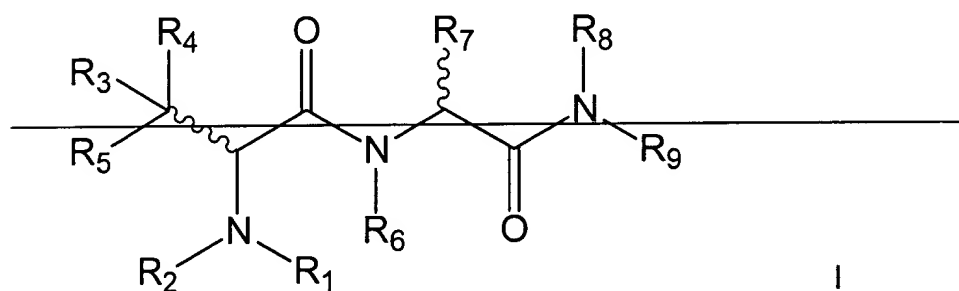
Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH;

-SR; -NH₂; -NRCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of: H; R; and -C(NH) (NH₂), or pharmaceutically acceptable salt thereof; and

an acceptable pharmaceutical excipient.

74. (Withdrawn) A method of treating tumors by arresting cell mitosis in a patient in need of such treatment comprising administering to said patient an anti-mitotic effective amount of at least one compound of claim 22.

75. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected such that neither R₁ or R₂ is tertbutoxy carbonyl (tboC), from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to one nitrogen atoms, zero to four sulfur atoms and the carbon atoms are optionally substituted with: =S, -OH; -SH, -NH₂, -I, -Br, -Cl, -F, -CN, -CO₂H, -CHO, -CONH₂, -COSH, -NO₂ and -SO₃H;

R₃ and R₄ are H or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic ~~skeleton~~ alkyl containing one to ten carbon atoms optionally substituted with: =O, =S, -OH, -SH, -NH₂, -I, -Br, -Cl, -F, -CN, -CO₂H, -CHO, -CONH₂, -COSH, -NO₂, -SO₃H, or R₃ and R₄ are joined to form a ring;

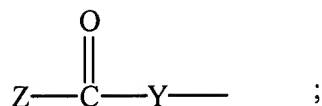
R₅ is selected from the group consisting of: H, R, ArR-, and Ar;

R₆ is H;

R₇ is ArR- or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -SH, -NH₂, -I, -Br, -Cl, -F, -CN, -CO₂H, -CHO, -CONH₂, -COSH, -NO₂;

R₈ is selected from the group consisting of: H and a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms optionally substituted with -OH; and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

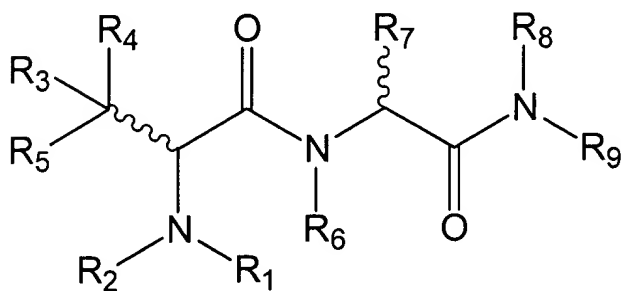
X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with phenyl, naphthyl, anthracyl, phenanthryl or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms optionally substituted with: =S, -OH; and

Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; or pharmaceutically acceptable salt thereof.

76. (Currently Amended) The A compound or pharmaceutically acceptable salt of ~~claim 75, wherein:~~ having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of: H, methyl, ethyl, propyl and n-butyl;

R₃ and R₄ are independently selected from the group consisting of H, methyl, ethyl, n-propyl and n-butyl, or R₃ and R₄ are joined to form a three to seven member non-aromatic ring;

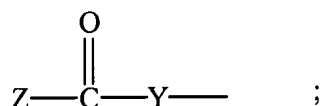
R₅ is selected from the group consisting of: R, ArR-, and Ar;

~~R₆ is H;~~

R₇ is ArR- or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, -OH, -SH, -NH₂, -I, -Br, -Cl, -F, -CN, -CO₂H, -CHO;

R₈ is selected from the group consisting of: H and CH₃; and

R₉ is:



R is defined as a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group,

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is defined as a moiety selected from the group consisting of: -OH, -OR, =O, =S,

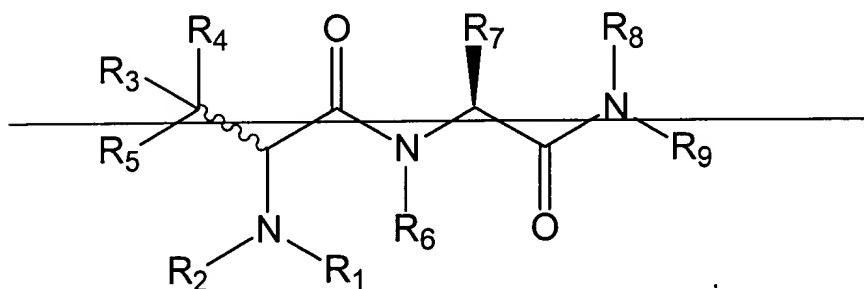
-O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

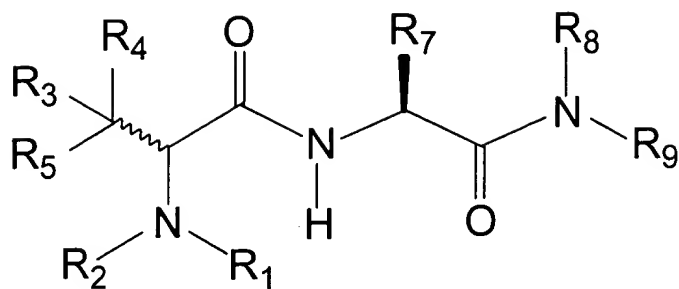
Ar is an aromatic ring selected from the group consisting of: phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon alkyl group, optionally substituted with phenyl, naphthyl, anthracyl, phenanthryl or a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms optionally substituted with: =S, -OH; and

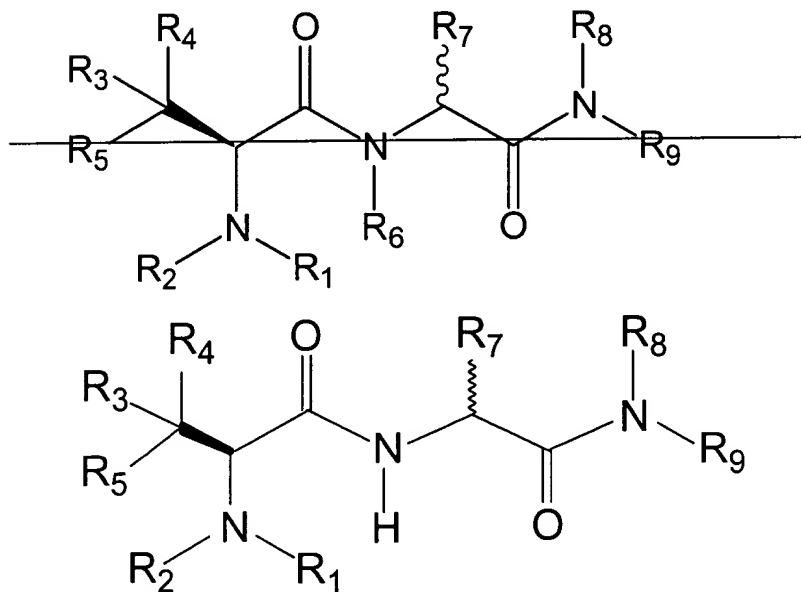
Z is defined as a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; or pharmaceutically acceptable salt thereof.

77. (Currently Amended) The compound of claim 75, having the configuration:





78. (Currently Amended) The compound of claim 75, having the configuration:



REMARKS

The Office Action dated October 8, 2004, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Claims 22-78 are pending in the present application. Claims 22, 26, 28, 30, 34, 61, 62, 64-66, 69, 71-73, and 75-78 are rejected. Claims 23, 25, 27, 31-33, 35-58, 60, 63, 67, 68, and 70 are objected to. Claim 74 is withdrawn from consideration by the Examiner. Claims 24, 29, and 59 are deemed to be allowable. Claims 22, 26, 28, 30, and 67 have been cancelled. Claims 23, 25, 27, 31, 34-38, 44, 46-47, 51, 53, 58, 60-66, 68-73, and 75-78 have been amended. No new matter has been added to the application.

Claim 73 is rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification.

Applicants submit that the amendments to claim 73 obviate the § 112, first paragraph, rejection. Accordingly, Applicants request reconsideration and withdrawal of the rejection.

Claims 22, 34, 61, 62, 64-66, 69, 71, 72, 75-78 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claim 22 has been canceled. Applicants submit that the amendments to claims 34, 61, 62, 64-66, 69, 71, 72, and 75-78 obviate the 112, second paragraph, rejection. Accordingly, Applicants request reconsideration and withdrawal of the rejection.

Claims 22, 26, 28, 30, 61 and 75 are rejected under 35 U.S.C. § 102(a) as being anticipated by WO 97/04004 to Johnson ("Johnson"). Claim 61 is rejected under 35 U.S.C. § 102(b) as being anticipated by Reetz (*Agnew. Chem., Int. Ed. Engl.*, 31(12), 1626-9, 1992) ("Reetz"). Claim 75 is rejected under 35 U.S.C. §102(b) as being anticipated by Reetz. Claims 22 and 61 are rejected under 35 U.S.C. §102(b) as being anticipated by Falender (*Biocatalysts and Biotransformation*, 13(2); 131-139, 1995) ("Falender"). Claims 22, 26, 61, 62 and 75 are rejected under 35 U.S.C. §102(b) as being anticipated by Chang, L.L. (*Bioorganic & Medicinal Chemistry Letters*, 2(10), 1207-12, 1992) ("Chang"). Claim 75 is rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,214,799 to Webber ("Webber"). Claims 75, 77 and 78 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,126,939 to Eisenbach-Schwartz ("Eisenbach"). Claims 22, 26, 61 and 75 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,811,515 to Grubbs ("Grubbs"). Claims 22, 26, 61 and 75 are rejected under 35 U.S.C. §102(b) as being anticipated by Baldwin, J.E. (*J. Chem. Soc., Chem. Comm.*, (16), 1280-1, 1986) ("Baldwin").

Applicants note that claims 22, 26, 28, and 30 are cancelled. Applicants submit that the amendments to claims 61 and 75 render moot the anticipation rejection to claims 61, 62, 75, and 77-78. Additionally, Applicants note that the substituents disclosed by the references do not teach the substituents in the presently claimed invention. Accordingly, Applicants request reconsideration and withdrawal of the rejection.


Claim 22 is rejected under 35 U.S.C. §103 as being unpatentable over Falender. Applicants have cancelled claim 22, and accordingly, this rejection is rendered moot.

In view of the above, Applicants respectfully submit that each of claims 23-25, 27, 29, 31-73, and 75-78 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicants also respectfully request that claims 23-25, 27, 29, 31-73, and 75-78 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this response is not considered to be timely filed, Applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to our Deposit Account No. 01-2300, referring to client-matter number 108281-00000, along with any other fees which may be required with respect to this application.

Respectfully submitted,


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